
Date: 3 Apr 94 18:13:58 GMT
From: news-mail-gateway@ucsd.edu
Subject: ANS-092 BULLETINS
To: info-hams@ucsd.edu

SB SAT @ AMSAT \$ANS-092.01
AMSAT-OE SPONSORS SEMINAR

HR AMSAT NEWS SERVICE BULLETIN 092.01 FROM AMSAT HQ
SILVER SPRING, MD APRIL 2, 1994
TO ALL RADIO AMATEURS BT
BID: \$ANS-092.01

AMSAT-Austria Sponsors Space Education Seminar 16-APR-1994 In Innsbruck

The AMSAT-Austria group (AMSAT-OE) will announce their first Educational Development Seminar meeting using the amateur radio satellites AO-21 and DOVE (DO-17). It is most fitting that these satellites will be used to broadcast the announcement of this meeting because the theme is the advancement science education through use and observation of OSCARs. Look for the announcement from DOVE beginning on 15-APR-1994 in its telemetry broadcasts and look for the synthesized voice message from AO-21 this week.

The meeting will take place on 16-APR-1994 at the Technical Highschool of Innsbruck, Austria and is being sponsored by the Department of Electronics and Telecommunication. The presenters planned will be OE1VKW, DG2CV, and EA2CLS/KB7HTA, and I2KBD. All of these radio amateurs are well known in educational circles. They have a lot of interesting information for those in attendance. All are invited to join AMSAT-OE at this seminar. For more information, contact Wolf Hoeller (OE7FTJ) at his INTERNET address of uibk.ac.at.

[The AMSAT News Service would like to thank Wolf Hoeller (OE7FTJ) for this bulletin item.]

/EX
SB SAT @ AMSAT \$ANS-092.02
OPERATING TIPS FOR AO-27

HR AMSAT NEWS SERVICE BULLETIN 092.02 FROM AMSAT HQ
SILVER SPRING, MD APRIL 2, 1994
TO ALL RADIO AMATEURS BT
BID: \$ANS-092.02

N8QGC & N4TPY Offer Some Operating Suggestions For AMRAD-OSCAR-27 (AO-27)

N8GQC has been working stations on AO-27 all the way from his Detroit area

QTH to as far away as Mexico City, Mexico, Baffin Island, and the North West Territories. He notes that these are great contacts for a Low Earth Orbiting (LEO) satellite. In his discussions with the AO-27's ground control station operator N4TPY, N8GQC has put together a list of "good operating practices" that N4TPY would like all those who use AO-27 to follow:

1. Please use as little power as possible. It is recommended that you use your H/T when possible. If not, then use no more than 25 Watts ERP.
2. Please try to be kind to other satellite operators. The object should be to make as many contacts as you can, and to step on as few as possible.
3. The satellite has no set schedule of availability at this time. The control stations will make it available only on weekends during daylight passes. Sometimes during the week AO-27 may also be on, but it will be "hit or miss."

N8QGC has worked AO-27 with a very simple set up. He transmits on the uplink frequency of 145.850 MHz using a homebrew 1/4 wave vertical antenna. His total uplink power is 10 watts. N8GQC find that this gives him a very strong signal into the satellite. But he especially wants hams to know that he has also worked AO-27 using a H/T with a "rubber-duck" antenna and 2.5 watts output! However, receiving this satellite can be somewhat difficult. N8QGC uses a KLM 440-6X antenna to receive. This is the the same 6 element UHF YAGI that he uses for transmitting on AO-21 when he isn't communicating through AO-27. AO-27's downlink can be heard on on 436.800 MHz. N8QGC is in the process of experimenting with several different receiving antennas. For mobile operations using AO-27 he has tried using his full-wave 70CM antenna on the car but has noted that doesn't work very well. On the receive side, he reports, it still takes a 6 element Yagi antenna.

By keeping the above suggestions in mind, all users of AO-27 will be able to enjoy it to its fullest capabilities.

[The AMSAT News Service would like to thank N8GQC & N4TPY for this bulletin item.]

/EX

SB SAT @ AMSAT \$ANS-092.03
SATELLITE W.A.E.Z.S. AWARD

HR AMSAT NEWS SERVICE BULLETIN 092.03 FROM AMSAT HQ
SILVER SPRING, MD APRIL 2, 1994
TO ALL RADIO AMATEURS BT

BID: \$ANS-092.03

Worked All European Zones by Satellite (W.A.E.Z.S.) Award Available

A0-10 and A0-13 user Mario Di Iorio (IW6BNC) is active from his QTH in Macerata located in the center of Italy, grid square JN63RH. Mario is also the manager of W.A.E.Z.S (Worked All European Zones by Satellite) Award. Mario reports that very few radio amateurs know of the existence of this award. The European zones are: 14, 15, 16, 20, and 40. The award is divided into a bronze, silver, and gold award. The following is the criteria for each category:

- 1) The basic award or the "Bronze" award can be obtained with a single QSO with any radio amateur station in Macerata, Italy and 3 European zones.
- 2) The "Silver" award can be obtained with making contacts with 4 European zones and 1 operator from Macerata, Italy.
- 3) The "Gold" award can be obtained with 5 European zone contacts plus one contact from any station in Macerata, Italy.

The following are the only valid amateur radio operators from Macerata. And they are: 1) IK6LMB, 2) IW6BNC, 3) IK6MQM. Send your requests for this award to:

W.A.E.Z.S AWARD MANAGER
c/o A.R.I. MACERATA
P.O. BOX 66
62100 MACERATA - MC ITALY

and please include 10 IRCs.

The original QSL cards are not needed as proof of confirmation of the contacts but only a list of QSOs containing all the details of the contacts between the stations involved. This award is valid for a single satellite but it changes with respect to the different modes of operation, e.g., SSB, CW or a mix of the two modes. IW6BNC hopes to see many stations striving to obtain the W.A.E.Z.S award. If you have further questions about this award and its rules, direct your inquiries to:

Mario Di Iorio (IW6BNC)
P.O. Box 66
62100 Macerata - MC
Italy

Or you can send IW6BNC a packet message to his local packet radio BBS of IW6BNC @ IW6BET.MC.ITA.EU.

/EX

SB SAT @ AMSAT \$ANS-092.04
LATEST ZRO TEST NOTES

HR AMSAT NEWS SERVICE BULLETIN 092.04 FROM AMSAT HQ
SILVER SPRING, MD APRIL 2, 1994
TO ALL RADIO AMATEURS BT
BID: \$ANS-092.04

WA5ZIB Offers The Some Observations On The Recent AO-13 ZRO Tests

The current round of ZRO Tests via AO-13 are complete. No tests were missed and all went well. Some interference was experienced on the February 19th test, but it was not critical. The tests of February 19th and 26th were completed just prior to AO-13's switch to Mode "S" with no time available for discussion with participants after the tests. These ZRO tests were scheduled very close to the mode-switch time due to a minor error in predictions made months in advance. The February 26th test was begun a few minutes early to ensure that all levels would be sent prior to mode switch. Many thanks to those on the AO-13 AMSAT Operations Net that identified the potential schedule conflict before it became a problem.

No new Z9 reports have yet been received, but there's plenty of time to send in submissions. There is no charge for copy verification although an S.A.S.E. is appreciated. Send your copy to: Andy MacAllister (WA5ZIB), AMSAT V.P. User Services, 14714 Knights Way Drive, Houston, TX 77083-5640.

More tests will be scheduled during the next season of Nadir pointing for AO-13. The dates will be posted to the AMSAT News Service (ANS).

/EX

SB SAT @ AMSAT \$ANS-092.05
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 092.05 FROM AMSAT HQ
SILVER SPRING, MD APRIL 2, 1994
TO ALL RADIO AMATEURS BT
BID: \$ANS-092.05

Weekly OSCAR Status Reports: 02-APR-94

AO-13: Current Transponder Operating Schedule:

M QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 Mar 19-Apr 04

Mode-B : MA 0 to MA 90 |

Mode-BS : MA 90 to MA 120 |

Mode-S : MA 120 to MA 122 |<- S beacon only

Mode-S : MA 122 to MA 145 |<- S transponder; B trsp. is OFF

Mode-S : MA 145 to MA 150 |<- S beacon only
Mode-BS : MA 150 to MA 180 | Blon/Blat 180/0
Mode-B : MA 180 to MA 256 |
Omnis : MA 230 to MA 30 | Move to attitude 235/0, Apr 04 240/0, Apr 04
[G3RUH/DB20S/VK5AGR]

FO-20: The following is the current schedule for transponder operations:

ANALOG MODE:

6-Apr-94 6:45 -to- 13-Apr-94 7:10 UTC

20-Apr-94 7:35 -to- 27-Apr-94 7:55 UTC

11-May-94 6:54 -to- 18-May-94 7:20 UTC

Digital mode: Unless otherwise noted above.

[Kazu Sakamoto (JJ1WTK) qga02014@niftyserve.or.jp]

AO-21: N8QGC has been working AO-21 from Detroit QTH and notes that AO-21 is operating normally. It is on the following schedule: 5 minutes of FM repeater operation followed by 4 minutes of WEFAX transmissions. Finally, the cycle is concluded with 1 minute of packet before switching back to FM repeter mode. [N8QGC]

AO-27: AO-27 now acting as a 'J' mode FM transponder and is proving very popular in Europe, with increased activity daily. It has a strong excellent quality downlink that can easily be heard on a hand-held receiver on 436.800 MHz +/- some 10 KHz of shift Doppler shift correction. It's sensitivity is far greater than 'B' Mode on AO-21. If there are no QRO stations on 145.850 MHz (+/- some 3 KHz of Doppler shift), uplinking using a hand-held which can produce 2 watts ERP is capable of putting an excellent full quieting signal into the transponder. As evidence G3IOR has worked several other European stations using 2.5 watt hand-held dual-band transceivers and for optimum footprint coverage to VE8DX who was running just 3 watts into a ground plane omni-directional from Baffin Island. All were fully quieting signals! [G3IOR]

STS-59: A brief reminder that STS-59 is scheduled to be launched on 07-APR-94 at 12:07 UTC and will carry the Shuttle Amateur Radio Experiment (SAREX) payload. For complete details, please refer back to the \$ANS-071.02 bulletin.

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

/EX

Date: Sat, 2 Apr 1994 09:19:52 -0700
From: ihnp4.ucsd.edu!usc!math.ohio-state.edu!cyber2.cyberstore.ca!nntp.cs.ubc.ca!
alberta!ve6mgs!usenet@network.ucsd.edu
Subject: ARLD018 DX news
To: info-hams@ucsd.edu

SB DX @ ARL \$ARLD018
ARLD018 DX news

ZCZC AE16
QST de W1AW
DX Bulletin 18 ARLD018

Date: Sun, 3 Apr 1994 14:12:36 GMT
From: world!slm@uunet.uu.net
Subject: Flea Market & Exams, Framingham, Mass., April 10
To: info-hams@ucsd.edu

Ham-Radio Flea Market Sunday, April 10 in Framingham

FRAMINGHAM, Mass. -- The Framingham Amateur Radio Association (FARA) is sponsoring a ham-radio-related flea market and exam session on Sunday, April 10, at Framingham High School. Dealers and private individuals will be selling radio equipment, parts, books, and other related material. In addition, FARA will be conducting exams for all categories of amateur radio license.

Admission to the flea market is \$5 at 9 a.m., and \$2 at 10 a.m. and after. Most exams require a \$5.75 fee. Pre-registration for exams is suggested; walk-ins will only be accepted on a space-available basis up to 10 a.m. For more information about exams, contact Dick Marshall at (508) 877-0563. For information about the flea market, call Lew Nyman at (508) 879-7456.

Talk-in will be available the day of the flea-market on the W1FY 2-meter repeater, 147.15 MHz.

Flea-market proceeds are used to support the activities of FARA and the Framingham High School amateur radio club, as well as FARA's annual scholarship program. For general information about the Framingham Amateur Radio Association, call the FARA club station at (508) 879-8097, or write to P.O. Box 3005, Framingham, MA 01701.

The FARA ham-radio station, W1FY, in the basement of the Danforth Museum building, is open to the public most Wednesday evenings and Saturday mornings. Meetings are the first Thursday night of each month, 7:30 p.m. at the club station, the next meeting is April 7. All are welcome.

--

electronic address: slm@world.std.com

Date: Sun, 3 Apr 1994 07:45:23 GMT
From: news.doit.wisc.edu!saimiri.primate.wisc.edu!hpg30a.csc.cuhk.hk!uxmail!
dma039.ust.hk!ee_hflo@decwrl.dec.com
Subject: Hamming in Hong Kong
To: info-hams@ucsd.edu

Chip Owens (owens@stout.atd.ucar.edu) wrote:
: Has anyone with a U.S. ham license had success getting
: a permit to operate in Hong Kong?

: I'm going there this summer and want to operate a ham
: station. Any help or info would be greatly appreciated.

: Chip Owens, NW00, Boulder, Colorado

You can apply for a a kind of temporary license in OFTA.
(OTFA:Office of Telecommunication Authority).
Address: OFTA , 25/f , Wu Chung Building, Wan Choi, HK island, Hong Kong.

Michael Lo
VR2YJR

Date: Sun, 3 Apr 1994 12:58:59 GMT
From: ihnp4.ucsd.edu!swrinde!gatech!wa4mei!ke4zv!gary@network.ucsd.edu
Subject: Hams, FCC, Delays, BS walks
To: info-hams@ucsd.edu

In article <CnJHHp.D3w@fore.com> ed@fore.com (Ed Bathgate) writes:

>

>I am surprised as to how few STRONG electronic techs & engineers there
>are anymore. Yes the trade schools are turning grads out in droves, but
>I bet that my wife could do more to trouble shoot a digital dashboard
>in a GM car than could the majority of Graduated Electronic techs!
>And she has only learned from watching me.

So what else is new? In the industry, we've always looked on these trade school grads as merely apprentice material. We know we'll have to teach them how to do trouble shooting and economical repair on the job. And a freshly minted engineer usually costs quite a bit more than he's worth until he gains a year or two of experience on the job. What they teach in school isn't what an employee really needs to know on the job.

>I recently looked for some Ham Radio Magazines, but only found 1 after
>a long drive to a large magazines only shop.

>

>I remember years back, you could go to just about any convenience store
>or food store and get Popular Electronics, Radio Electronics, Elementary
>Electronics, CQ, 73, and on some occasions QST.

You must shop in the wrong stores. Winn Dixie supermarkets carry all of the above except QST (though some of the mags have changed names). The league doesn't seem to push rack sales of QST, but since it's supposed to be a membership journal, I guess that's understandable.

>Those days are gone. I counted no less than 12 different Wrestling
>mags, 6 music magazines, 5 bridal mags, 6 off road mags, 3 hot rod mags,
>4 different bathing suit mags (sim to sports illustrated swimsuit)

Only 3 Hot Rod mags? You're definitely shopping in the wrong stores. And where are the 20 or 30 computer mags?

>At my job, we have entry level data entry people who make higher salaries
>than the Trained & Experienced Technicians who do the final test &
>debugging of the products.

>

>It seems that Technicians & Engineers are a dying/ignored group,
>bean counters & paper pushers are the cream of the crop.

Sigh, it was ever thus. If you want to make money, being an electronics tech or engineer isn't the road to wealth in companies. You'll have to open your own shop, and then you'll find you're spending more time as an administrator and financial manager than you are at being an electronic tech or engineer. That's the business world for you. Businesses are money machines, and those who tend the money are the ones who get to take home the most money. Engineers and techs are expenses to be minimized.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: Sun, 3 Apr 1994 13:31:53 GMT
From: ihnp4.ucsd.edu!swrinde!gatech!wa4mei!ke4zv!gary@network.ucsd.edu
Subject: How phasing SSB Exciters Work (Was: RF and AF speech processors)
To: info-hams@ucsd.edu

In article <CnJrA3.1I3@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

[chart deleted]

>: Now this chart illustrates the problem I've been talking about. As
>: we can see, the difference in delay with frequency is quite marked.
>: Sure the phase delay increases *smoothly* with frequency delta, but
>: the magnitude of the error rapidly climbs with increasing frequency
>: delta. This is our old friend click-boom. ...

>

>Other people besides Gary may be confused by this, so I'll post an
>explanation.

I'm not confused. I calculated the delays based on the graph you posted.
Delay equals the reciprocal of frequency times the total phase delay in
degrees divided by 360.

>The graph above plots phase, not delay. A constant delay results in
>a constantly-rising phase plot. For example, a 1 millisecond delay
>is 36 degrees at 100 Hz, 360 degrees at 1000 Hz, 3600 degrees at
>10,000 Hz, etc.

Yeah, but that isn't what your graph showed.

>While the plot above looks like a straight line, it really isn't because
>of the logarithmic x-axis.

Bingo! I check plotted it on semi-log paper then replotted on a linear
graph from which I calculated my differential delay numbers.

>However, as the chart that Tom Bruhns posted of
>a typical phase-shift network shows, it really isn't too bad. His chart
>shows that between 400 and 2786 Hz, the maximum phase error from a straight
>line varies smoothly between +17.2 to -20.9 degrees, which is far better
>than you would get with a typical transceiver-type crystal filter.

As I commented, his table looked much better than your graph, and I
calculated differential delays based on it too that were nearly 10
times smaller. It's just that I've seen phase plots for crystal and
mechanical filters which, *away from the edges*, where Tom's table
looked bad too, looked at least as good as Tom's phase shifter. And

note also that the network Tom modelled is not "typical", it is considerably more complex than the traditional Dome based networks. They tend to really suck in the differential delay department because they're based on the same simple semi-log response as your graph. I don't think he included an AF pre-filter in the table either.

I'll readily agree that the receiver type filters used in many ham rigs for SSB transmit signal generation, suck wind. But that's a different issue. Good filter designs are available, as witness filters we use for VSB video, and in certain telco FDM equipment that have a maximally flat phase response in the passband. We simply can't tolerate differential delay in video systems, yet we use filters instead of phasing to generate VSB signals. It's not a matter of economy, it's what works best.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: 3 Apr 94 23:02:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: Large Diameter Air-Core Coils
To: info-hams@ucsd.edu

Text item: Text_1

I need some large diameter, 4-6", coils for some mobile antenna experiments. Long ago, one could just open a catalog and order Air-Dux coils of any size... are they still available? My junk box is getting very low. Does BW still sell 'em... anyone have BW's address if they do?

thanks and 73, Cecil, kg7bk@indirect.com
(I don't speak for Intel)

Date: 3 Apr 1994 14:37:05 GMT
From: ihnp4.ucsd.edu!agate!usenet.ins.cwru.edu!odin!trier@network.ucsd.edu
Subject: Long directories
To: info-hams@ucsd.edu

In article <Cnn6ru.A6I@eskimo.com>, Mark Zenier <mzenier@eskimo.com> wrote:

>That doesn't work if you're reading offline. First you wait for
>your news packer (uqwk) to build the download files, ...

Do you have a kill file available? Perhaps you should pester the "news packer" author to add kill file support. That would solve the problem neatly and in a general way.

Stephen

--

Stephen Trier KB8PWA "It don't mean a thing if it ain't got that
Other: trier@ins.cwru.edu certain je ne sais quois."
Home: sct@po.cwru.edu - Peter Schickele

Date: Sun, 3 Apr 1994 08:17:17 GMT
From: hobbess!earth.armory.com!dev@uunet.uu.net
Subject: Operation of Ham radios on planes
To: info-hams@ucsd.edu

i know this subject comes up every so often, and if it's in teh faq, then i didn't look carefully enough, but what's the deal on operation of ham radios on a plane?

last time i saw this subject mentioned i believe the ruling was that the FCC said it was up to the FAA, and the FAA said that it was legal if the pilot of the plane said it was okay. i have a friend who is a pilot and a ham, and says that other fellow pilots who are also hams have been known to put ham antennas on their planes and put radios in the plane and use 'em.

now, of course i'm not silly enough to try to operate my HT on a commercial plane, since the chance of being able to talk to the pilot is about nil, and they'd probably say no anyways, but as far as i can tell, if it's a private pilot, and they don't think it will interfere with the avionics (easy enough to test on the ground, or briefly in the air, it's cool to use yer radio if you want.

anyone know where the official rules on this might be found? the FCC rule book? the FAA's version of a rule book? i'd just like to be able to point to some "official" document that says yea, nay, or depends.

--

David Vangerov, KD6WXQ
dev@deeptht.armory.com

Date: (null)
From: (null)
SB DX ARL ARLD018
ARLD018 DX news

The items in this week's bulletin are courtesy of Bob, W5KNE, QRZ DX, Chod, VP2ML, The DX Bulletin, Bob, WB2DIN, James, K6OZL, the Yankee Clipper Contest Club PacketCluster network, and Contest Corral in QST. Thanks.

YEMEN. Achmed, ex HZ1FM, has activated club station 701AA. The return of 701AA to the airwaves was on March 30. Equipment left by Paul, F6EXV, is being refurbished and expected to be on-line soon. Schedules for QSOs with stateside stations have been set up. On Friday try 14243 kHz at 1500z with OE6EEG as net control. On Saturday try the same frequency at 1600z, again with OE6EEG. Plans are to move to the 14226.5 Family Hour Net shortly thereafter. QSL via Box 485, Aden, Yemen.

MACAO. XX9AS, OH6D0, OH2KNB and OH2BH have an Easter Holiday gift for you. They will be putting XX9TZ on the air from the Hyatt Regency on Taipa Island from Friday, April 1 through Monday the 4th. Though this will be an all band effort, pay particular attention to 25 kHz up on 40, 20, 15 and 10 meters for CW, and 7065, 14195, 21295 and 28495 kHz for SSB.

FRANZ JOSEF LAND. R1FJC has been on the air recently. This could be the first of a new series of call signs for the island.

JUAN DE NOVA ISLAND. Listen for FR5ZQ/J to be active through the end of April. Check 14247 kHz between 1700 and 1900z, and 14256 kHz from 0200 through 0400. QSL via CBA.

ARLD018 Part 2

EUROPA ISLAND. FR5ZU/E is on the air and plans operations to last for four or five weeks. Try the same frequencies and times listed for Juan de Nova above. QSL via CBA.

BANGLADESH. UA4RZ plans to be signing S21ZL soon.

BANABA ISLAND. Listen for T33CS and T33KK throughout this

weekend. QSL via G4WFZ and SM7PKK respectively.

TRINDADE ISLAND. PY1UP will be on as PY0TUP from April through August. QSL his home call sign.

NIGERIA. Rudi, DL9GMM/5N0, will be on until year end from Lagos, mostly with CW at 100 watts. Try 3513 kHz at 2300z, 10104 at 2350 and 14014 at 2115. QSL via home call sign after his return to Germany.

THIS WEEKEND ON THE RADIO. The Holyland DX Contest, sponsored by the Israel ARC, is a 24 hour event that starts at 1800z April 2. Exchange signal report and serial number beginning with 001. Israeli stations will send their area instead of a serial number.

The SP DX CW Contest runs from 1500z April 2 through 2300z April 3 on 160, 80, 40, 20, 15 and 10 meters. Non SP stations send a six digit serial number consisting of RST and serial number starting with 001. Polish stations will send RST and a two letter province designator.

For more details on these operating events, check page 119 of March QST.

NNNN

/EX

End of Info-Hams Digest V94 #371

